

REMARKS

Claims 1-6, 8-11, 13, 14, 31, 32, 39 and 40 are as previously presented, and claim 33 is as originally filed. Claims 7, 12, 15-30, 37 and 38 were previously canceled. Claims 34-36 were amended, however no new matter was introduced with these amendments.

With these amendments, claims 1-6, 8-11, 13, 14, 31-36, 39 and 40 are pending.

Interview Summary

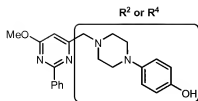
Applicants thank Examiner Cecilia Jaisle for the courtesy extended to the undersigned during the telephone interviewing conducted in connection with this application on September 28, 2011, with respect to the erroneously issued Advisory Action. Examiner Jaisle agreed that the Advisory Action was issued in error, and agreed to withdraw the Advisory Action and issue an Office Action instead.

Rejections under 35 U.S.C. § 102

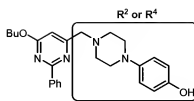
The claims stand rejected under 35 U.S.C. § 102 (b) as being unpatentable over Kampe (US 4859670), Howe (J. Med. Chem., 1972, 15(10), 1040-1045), and Seiler (EP 0136976). Applicants respectfully disagree for the following reasons:

Applicants believe these rejections are issued in error. In particular, these rejections were withdrawn by the Office during the telephone call on July 1, 2011, when Examiner Jaisle informed the Applicants that the rejections in view of these references were withdrawn. In addition, the Office's remarks following these rejections reference the Applicant's remarks of 12-20-2010 (p. 6-7 of the Office Action). Applicant's remarks of December 20, 2010, are not the latest arguments presented by the Applicants regarding these rejections; rather, the Applicants direct the Office to the remarks submitted in the Response filed July 1, 2011, which are repeated below.

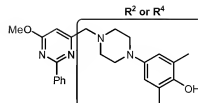
1. The Office maintained the 102(b) rejection in view of Kampe (US 4859670) asserting that compositions with RN numbers 111921-21-2, 111921-25-6, 11921-26-7, 111920-67-3, 111920-68-4, 111920-69-5, and 111920-75-3 (compounds shown below) still anticipate the claims.



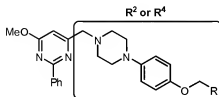
RN 111921-21-2



RN 111921-25-6

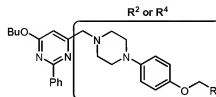


RN 111921-26-7



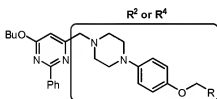
R = (2R,4S)-2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl

RN 111920-67-3



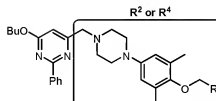
R = 2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl

RN 111920-68-4



R = 2-(2,4-dichlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-4-yl

RN 111920-69-5

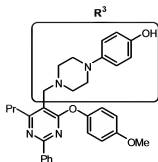


R = 2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl

RN 111920-75-3

For these compounds to anticipate the claims, either R² or R⁴ would need to be heterocyclylalkyl substituted with 4-hydroxyphenyl or derivatives thereof. But the definition of R² in the present claims does not include “optionally substituted heterocyclylalkyl.” In addition, R⁴ can be “optionally substituted heterocyclylalkyl”, but the definition of Q¹ in the present claims does not include a 4-hydroxyphenyl substituent on an “optionally substituted heterocyclylalkyl” group; *i.e.*, Q¹ can only be aryl and cannot be substituted aryl (e.g., 4-hydroxyphenyl). In other words, while R⁴ can be “(4-phenylpiperazinyl)methyl” substituent, it cannot be “(4-(4-hydroxyphenyl)piperazinyl)methyl” or its derivatives as is recited for the compounds with the above-referenced RN numbers.

The Office also cited the composition of compound with RN number 111921-44-9:

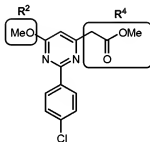


RN 111921-44-9

For this compound to anticipate the claims, R^3 would need to be heterocyclalkyl (i.e., piperazinylmethyl) substituted with 4-hydroxyphenyl or derivatives thereof. But the definition of R^3 in the present claims does not include heterocyclalkyl. Therefore, this compound does not anticipate the claims.

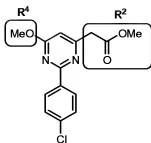
Therefore, none of the eight (8) compounds of Kampe cited by the Office anticipate the claims.

2. The Office maintained rejection in view of Howe (J. Med. Chem., 1972, 15(10), 1040-1045) citing compound with Registry No. 19899-98-0. For the compound to anticipate the claims, R^2 would need to be methoxy (e.g., $-OR^6$, and R^6 is unsubstituted alkyl) and R^4 would need to be $-R^{12}-C(O)R^{15}$:



But the definition of R^2 in the present claims does not encompass $-OMe$ because R^6 cannot be unsubstituted alkyl.

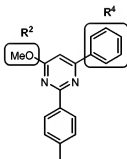
On the other hand, for this compound to anticipate the claims if the positions of R^2 and R^4 were reversed, R^2 would need to be $-R^{12}-C(O)R^{15}$ and R^4 would need to be alkoxy:



But the definition of R^4 in the present claims does not encompass alkoxy, nor does the definition of R^2 include $-R^{12}-C(O)R^{15}$.

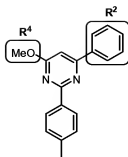
Thus, Howe does not anticipate the present claims.

3. The Office maintained the 102(b) rejection in view of Seiler (EP 0136976) citing compound with Registry No. 77232-23-6. This compound is useful for regulating plant growth. There is no disclosure of a pharmaceutically acceptable composition or a formulation in a pharmaceutically acceptable vehicle. In addition, the compound RN 77232-23-6 cited by the Office does not anticipate the claims.



For this compound to anticipate the claims R^2 would need to be methoxy (e.g., $-OR^6$, and R^6 is unsubstituted alkyl) and R^4 would need to be aryl (see the structure above where the positions corresponding to R^2 and R^4 are circled.) But the definition of R^2 in the present claims does not include $-OMe$ because R^6 does not include unsubstituted alkyl.

Even if the positions of R^2 and R^4 are reversed, R^2 would need to be aryl and R^4 would need to be alkoxy:



But the definition of R^4 in the present claims does not include alkoxy, nor does the definition of R^2 include aryl. Therefore, this compound of Seiler does not anticipate the current claims.

For all of the above reasons, Applicants submit that the claims are not anticipated by the cited references. Reconsideration and withdrawal of rejections under 35 U.S.C. § 102 (b) is respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claims 1-6, 8-11, 13, 14, 31-36, and 40 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of **Kampe** (US 4859670), **Seiler** (EP 0136976), **Fujikawa** (US5026708), and **Howe** (J. Med. Chem, 1972, 15(10), 1040-1045). Applicants respectfully disagree for the following reasons:

As noted above, Applicants believe these rejections are issued in error because the Office withdrew these rejections during the telephone call on July 1, 2011. In addition the Office's remarks following these rejections reference the Applicant's remarks of 12-20-2010 (p. 16-20 of the Office Action), and the Applicants direct the Office to the remarks submitted in the Response mailed on July 1, 2011. Regardless, Applicants response to the rejections is below.

The Office issued the 103(a) rejection in view of **Kampe** (US 4859670), **Fujikawa** (US5026708), and **Howe** (J. Med. Chem, 1972, 15(10), 1040-1045) asserting that the claimed compounds are alkyl homologs and/or position isomers of the cited compounds and thus obvious to the skilled chemist for the same utility. But as is evident from the discussion of these publications above, the compounds of these publications are neither alkyl homologs nor positional isomers of the claimed compounds. Thus, the compounds of the prior art are not similar structures and not expected to have similar properties to those claimed. A person of skill

in the art would not be motivated to modify the prior art compounds to arrive to the presently claimed matter based on the teaching of the above-listed references.

In addition, the present application includes biological activity data of the claimed compositions in Figures 1A-1O that demonstrate the activity in Gal4-chimera-reporter gene assay. These results indicate that the claimed compositions show significant activity in this assay. Figures 2, 3, 4A and 4B disclose additional biological activity. For example, Figures 4A and 4B show that the claimed compositions are able to selectively activate Nurrl/RXR heterodimers but have minimal ability to directly activate RXR. The prior art does not teach that the compounds disclosed therein have activity in Gal4-chimera-reporter gene assay or that they are able to selectively activate Nurrl/RXR heterodimers. There is nothing in the prior art that would make obvious to one of skill in the art that the compounds of the prior art could or should be modified in a manner that results in the compounds recited in the present claims or that such compounds would have activity in the Gal4-chimera-reporter gene assay. Because a compound and all of its properties are one, the present claims, therefore, cannot be obvious. *In re Papesch*, 315 F.2d 381, 391, 137 USPQ 43, 51 (CCPA 1963) (“From the standpoint of patent law, a compound and all its properties are inseparable.”).

2. The Office also maintained the 103(a) rejection in view of Seiler (EP 0136976). Applicants respectfully submit that Seiler discloses compounds that are regulators of plant growth. Seiler does not disclose or suggest pharmaceutically acceptable compositions or formulations in a pharmaceutically acceptable vehicle. The teaching of Seiler is insufficient to make the presently claimed pharmaceutical composition obvious because there is no suggestion that the composition for regulating plant growth could or should be modified in a manner to give a pharmaceutical composition. Nor is there anything in the art to suggest that the composition for regulating plant growth would have pharmaceutical utility.

Therefore, one of skill in the art, having either one of these references at hand, would not arrive at the claimed compositions. As a result, reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. 103(a) is respectfully requested.

Additional Amendments

Advisory Action, which was issued in error on September 1, 2011, raised several rejections of claims 34-36. Even though the Office did not raise these rejections in this Office

Action (mailed on October 4, 2011), Applicants amended the claims to overcome them. The following is a summary of our amendments:

Claim 34 was amended to remove the comma (,) from the last line of the claim.

Claim 35 was amended to remove the phrases “such as” and “e.g.” and to remove the limitations following these phrases. The limitations following “such as” and “e.g.” are redundant because these limitations are encompassed by the terms preceding “such as” and “e.g.” For example, the recitation “such as melinamide” was deleted because melinamide is encompassed by the term “acyl-coenzyme A cholesterol acyltransferase (ACAT) inhibitor”.

Claim 35 was also amended to define the term “fibrates”. In particular, this term was replaced by the definition found at page 76, lines 32-33 of the specification as filed.

Claim 36 was amended to define the term “physiologically active fragment thereof”. In particular, this term was replaced by the specific example, hPTHF 1-34. Support for this amendment can be found at page 77, line 8.

In light of the all above arguments and amendments, Applicants respectfully request reconsideration and withdrawal of the rejections of the pending claims. If the Examiner believes it to be helpful, the Examiner is invited to contact the undersigned representative by telephone at (312) 913-0001.

Respectfully submitted,

Date: January 4, 2012

/Jelena Janjic Libby/
Jelena Janjic Libby
Registration No. 64,347

Telephone: 312-913-0001
Facsimile: 312-913-0002

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive
Chicago, IL 60606